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Basic Internet
— FOUNDATION —
Connect The Future

IEEE 6G Summit 2024, 13-14 May 2024, Dresden

6G for Connecting the Future of Every Single Human

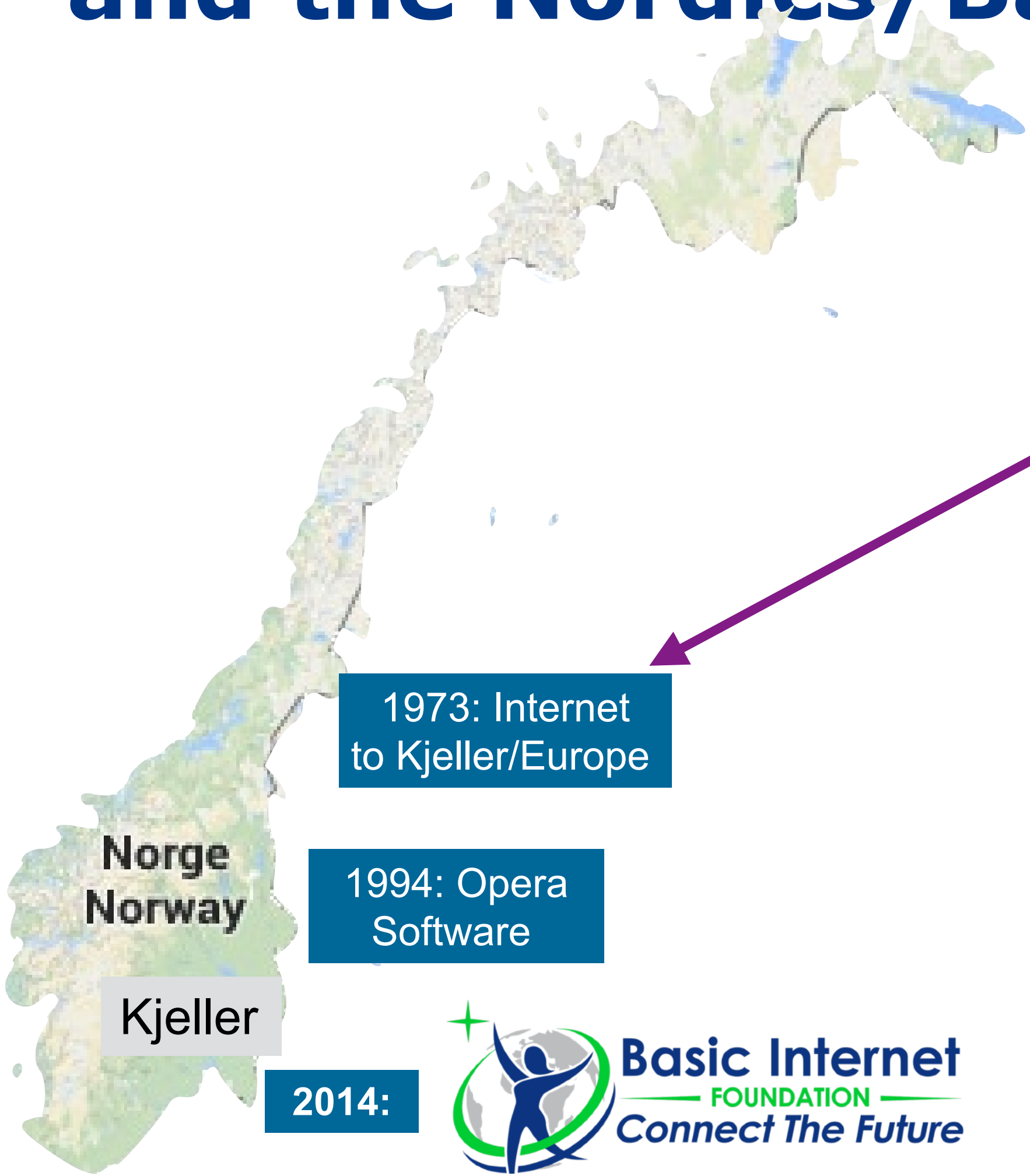
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Inclusive digitalisation in Norway and the Nordics/Baltics (N8)



1973: Internet to Kjeller/Europe

1994: Opera Software

2014:



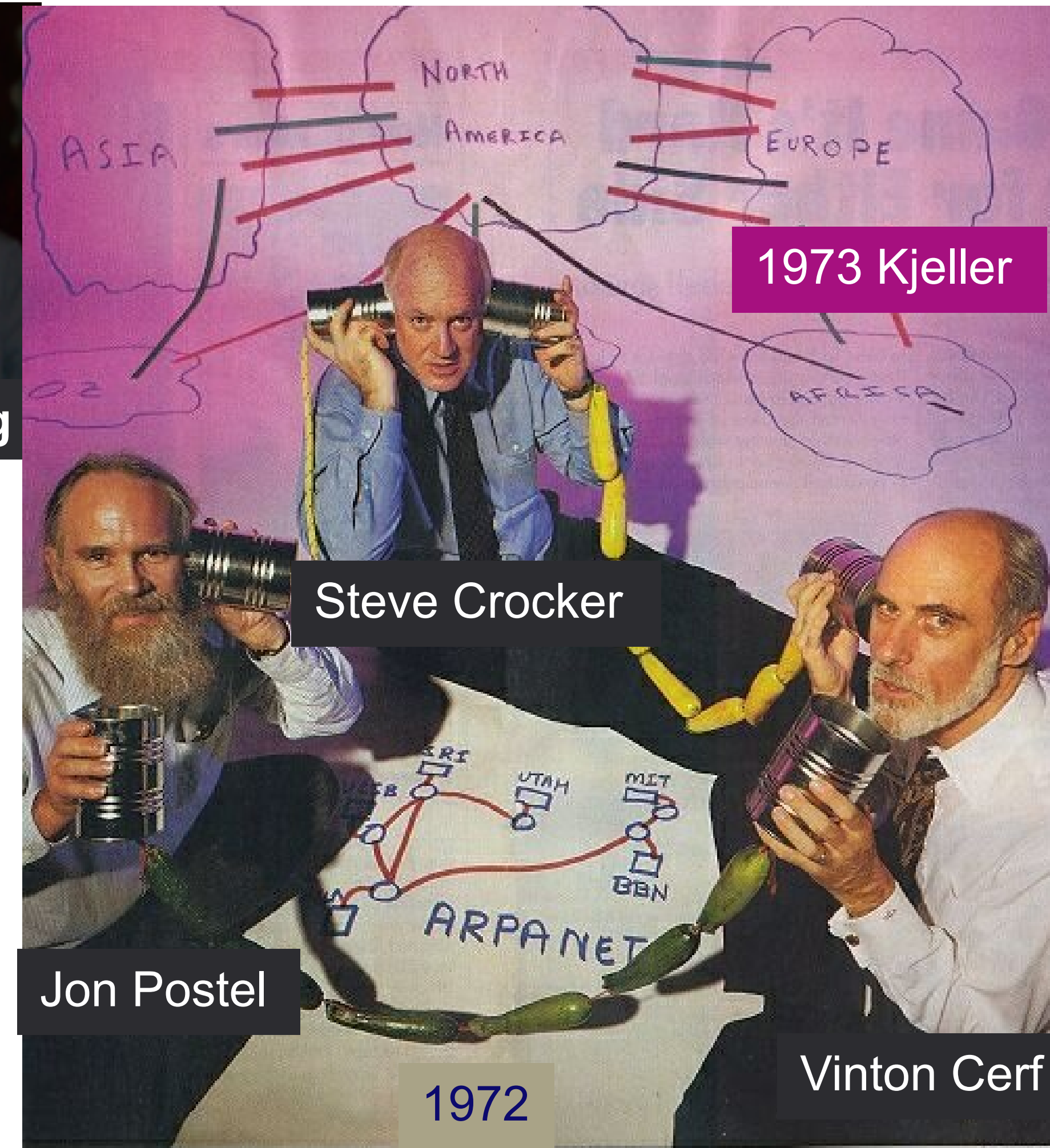
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Yngvar Lundh

Pål Spilling

.php, OpenSource, Linux, Skype, Spotify
 Opera Software, FAST search
 Nokia, Ericsson
 GSM
 GovStack.global, X-Roads



Steve Crocker

Jon Postel

Vinton Cerf

1972

Source: <http://www.michaelkaul.de/History/history.htm>



9.c

Significantly **increase access to information** and communications technology and strive to **provide universal and affordable access** to the **Internet** in least developed countries **by 2020**



- **57%** of the global population (4.6 billion people) using mobile internet
 - 30% decline in new mobile broadband (200 million new users in 2023)
 - **95% of unconnected** people in LDCs
- Adults in **rural 29% less likely** to use mobile Internet (compared to urban)
- Gender Gap: **Women 19%** less likely
- 41% South Asia, 36% in SSA



The State of Mobile Internet Connectivity 2023



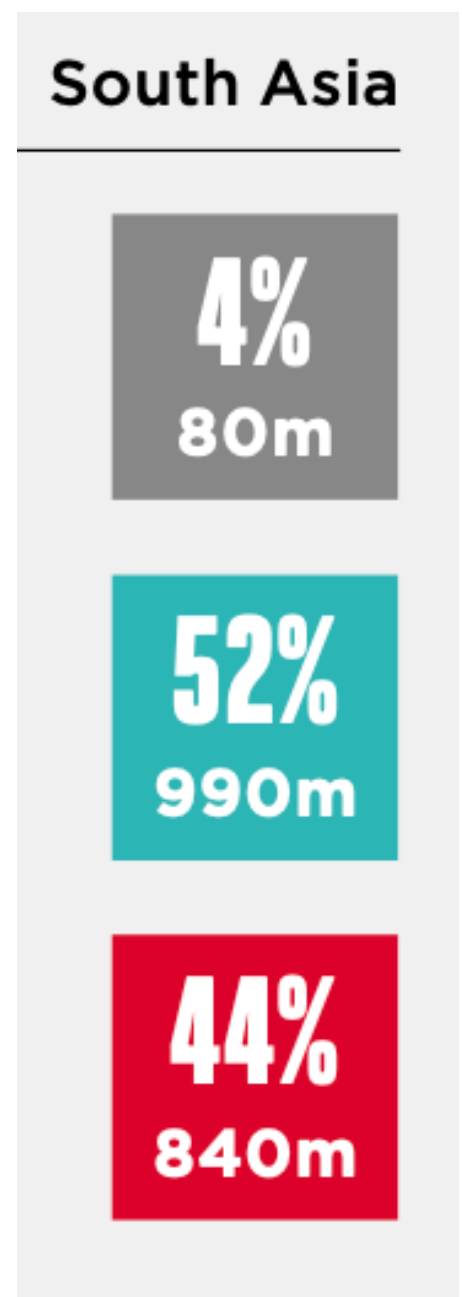
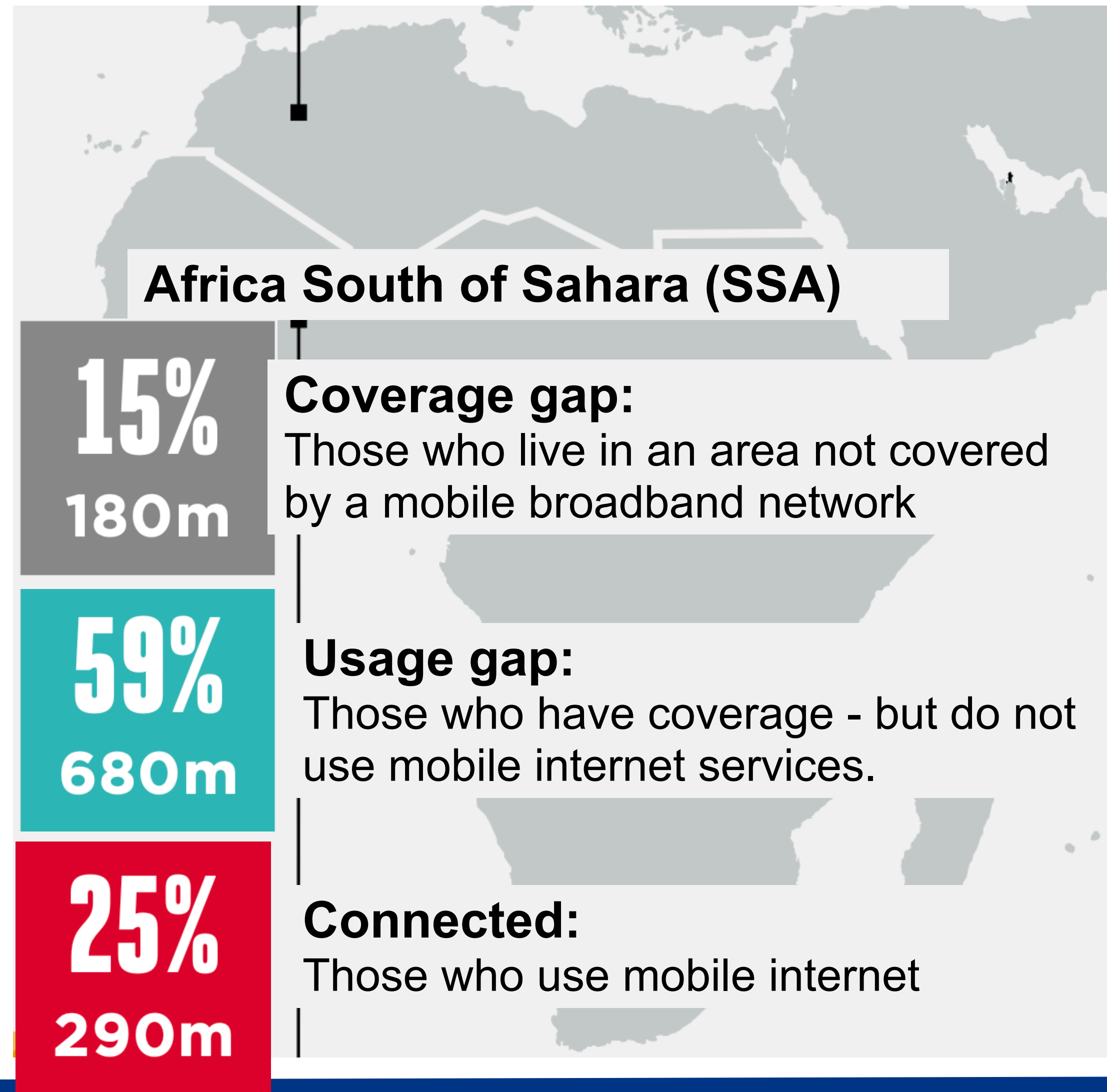
Digital Inclusion?

SSA:
75% not using mobile internet

SSA:
49% rural / urban gap

People in rural are more likely to have **reduced** their mobile **internet use**


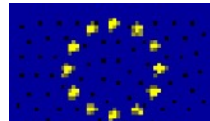
Women
900 million don't use **mobile internet** (2/3 living in SSA or South Asia)



[Source: GSMA 2023]

The Business Model Mobile Internet in SSA

→ Western World

- fixed & mobile & work - about 100-200 USD/family
-  17.000 base stations,  EU: 421.000 towers [Statista]

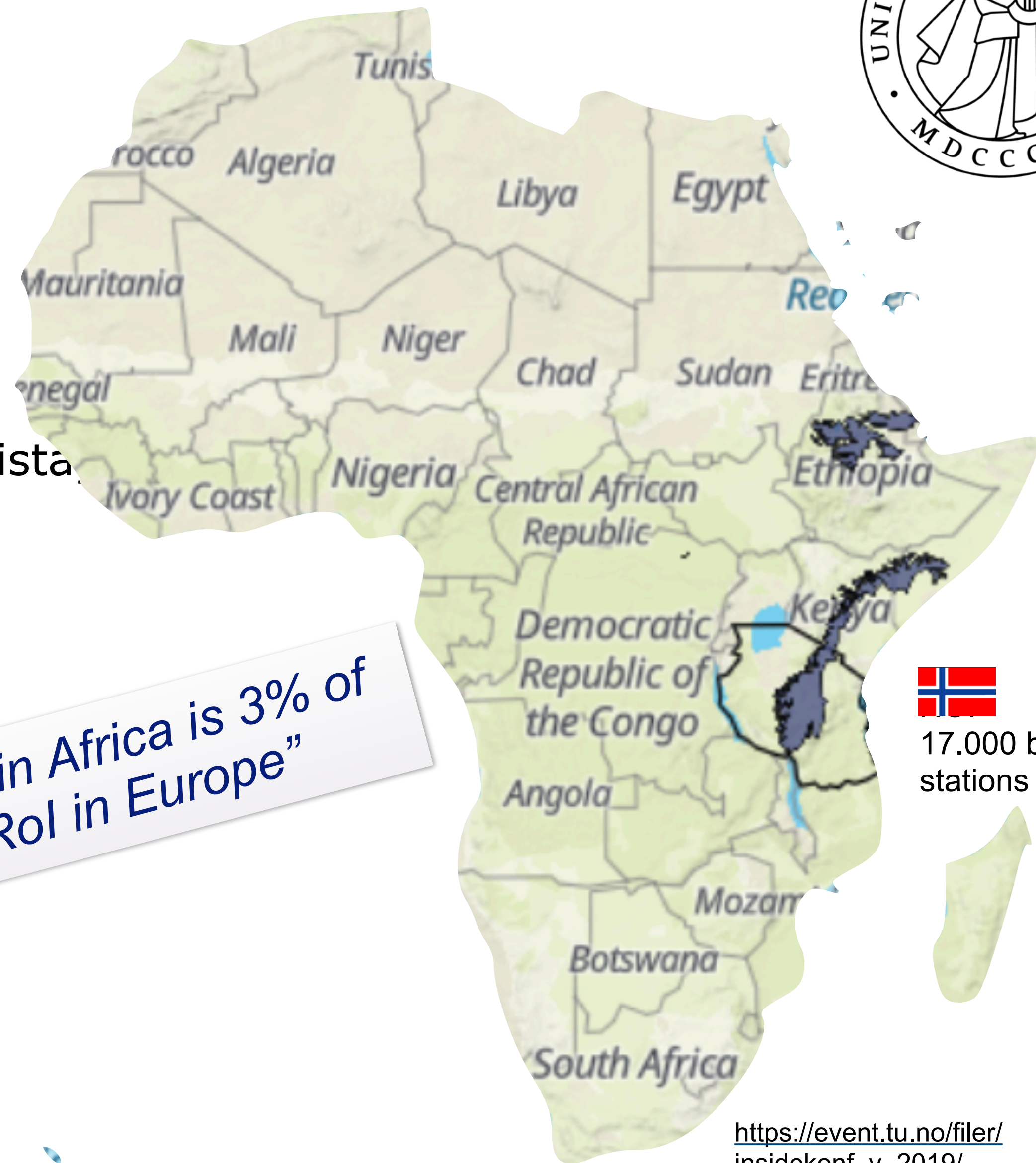
→ Example: Tanzania

- large distances (3 x size of Norway)
 - expensive access
 - negligible fixed broadband
- ability to pay: 10-20 USD/family

→ Europe vs Africa

- 6.8% vs 20% of land area
- 746 million vs 1.3 billion (2018)
- 112 vs 43 people/km² [Worldbank, Statista]

“RoI in Africa is 3% of
RoI in Europe”



17.000 base
stations (2022)

https://event.tu.no/filer/insidekonf_v_2019/Eivind_Mikkelsen_Trenger_Norge_100.000_basestasjoner.pdf

“Internet had the ability to dismantle the divide.
Internet failed miserably, the divide is bigger than ever.”
Kate Gilmore, Human Rights, UNOG, 2017



<https://basicinternet.org/5g-is-for-the-benefit-of-telecomm-operators-not-us-as-consumers/>

Digitaliseringsminister Nikolai Astrup (H) og direktør Jenny K. Lindqvist i Ericsson under en pressekonferanse om 5G-teknologi i Telias lokaler i Nydalen i Oslo i oktober 2019. Foto: Håkon
-5G-nettet er til fordel for teleoperatørene, ikke forbrukerne

29Apr2020



“Universities have a vital role in shaping the future of the society” (Session 369)

How can we “Connect The Future”? and what are the roles of the Universities

“Connect the Unconnected
- how can we achieve it?”
Prof Josef Noll, University of Oslo, 2023



Doreen Bogdan-Martin,
Secretary-General ITU

What if ...

We revisit access

We decentralise the Internet

We use Universities to connect

Revisit Access

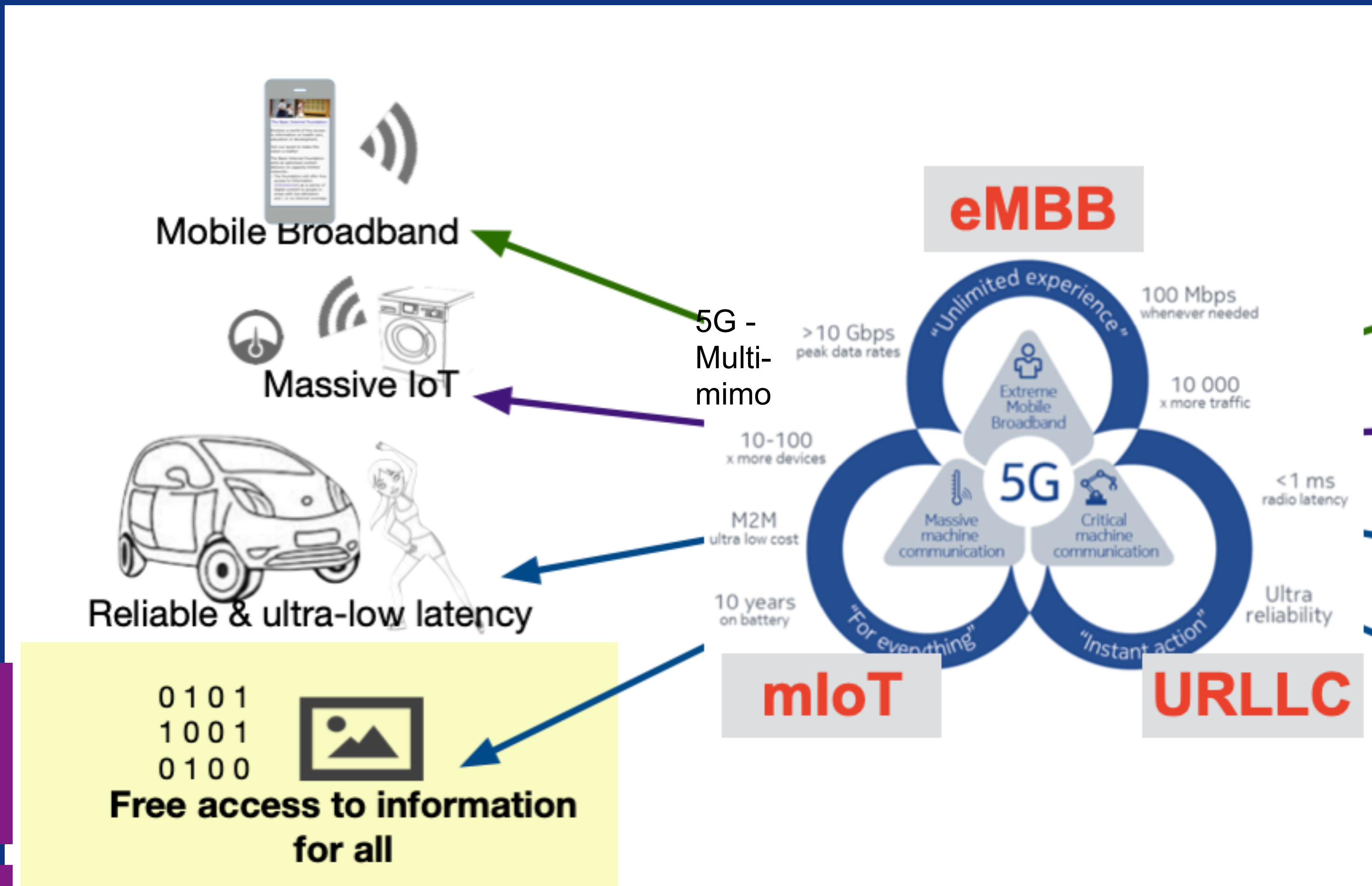
5G lacks digital inclusion

Road model:
pedestrians & cyclists

Digital pedestrians, digital
cyclists vs digital cars
(broadband)

Internet Lite
as a Digital Public Infrastructure (DPI)

& 6G large cells



Digital Public Infrastructure (DPI)

Step 1:



[Source: <https://www.gatesfoundation.org/ideas/digital-public-infrastructure>]

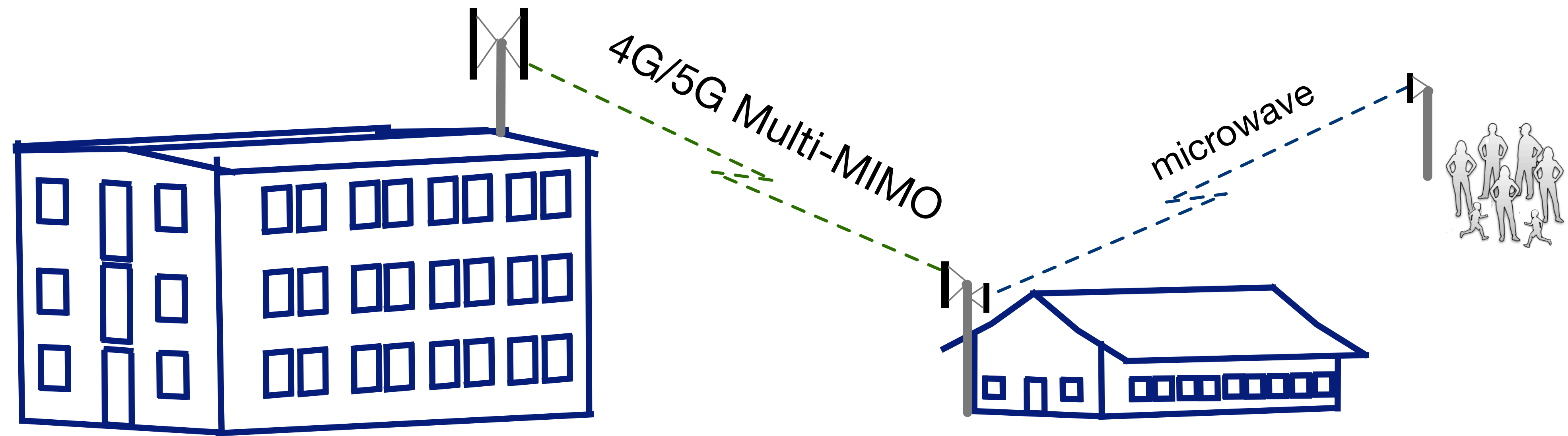
Step 2:





Instantiation of Digital Public Infrastructure

- build: Regional Competence Centres (RCCs)
- connect: Schools & Communities (CL3)
- provide: Non-profitable content



InfoSpots for CL3
Community
Learning &
Living
Labs



National Research & Education Networks (NRENs)

Energy, Access & Information

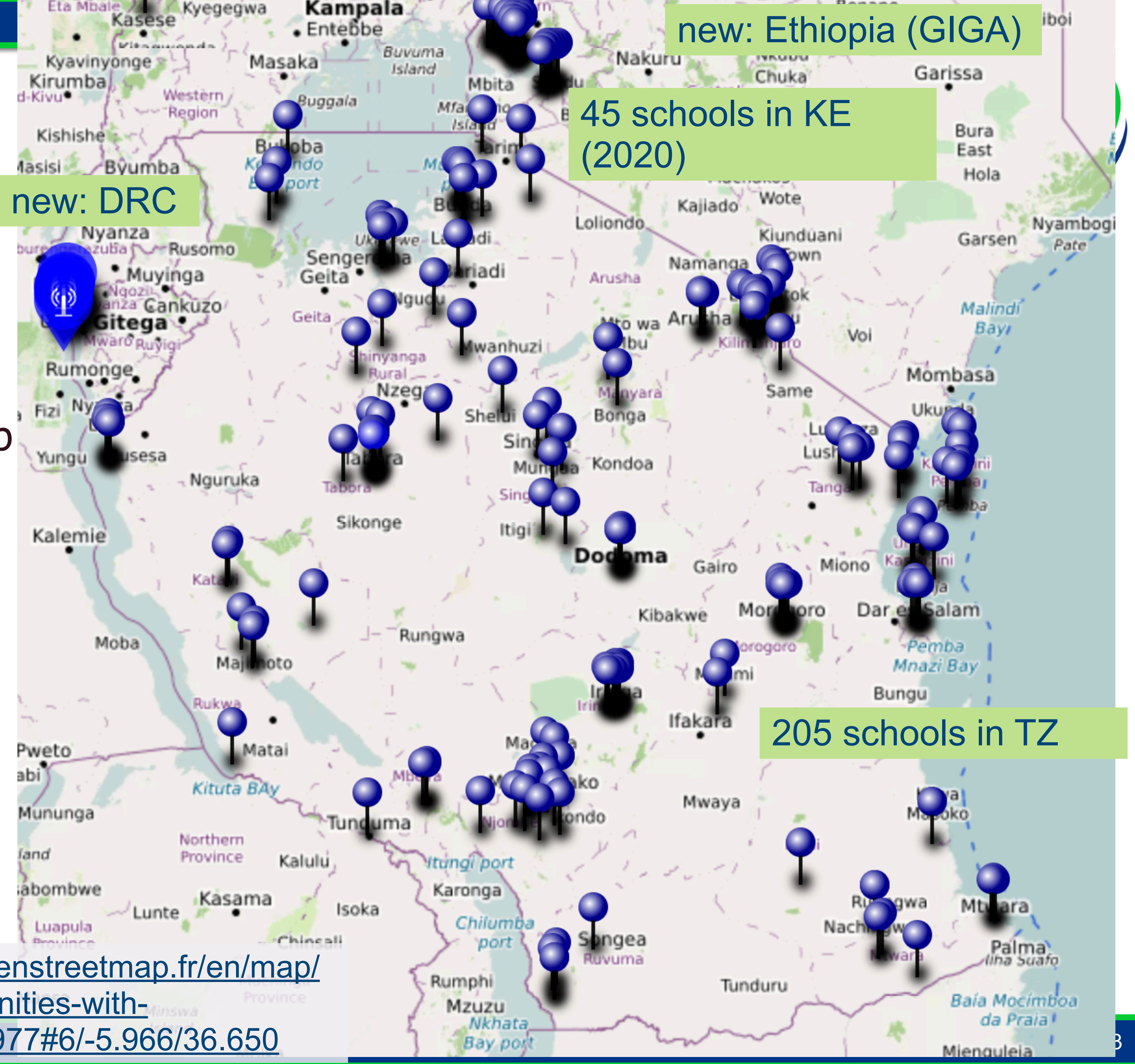


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6G societal vision

- Connectivity everywhere
 - ★ every school (GIGA)
 - ★ Community Learning & Living Lab (CL3)
- Affordable access
 - ★ "5 for 50" (5 Mbps for 50 kTZS = 20 USD)
- Digital Public Infrastructure (DPI)
- Join us: BasicInternet.org



https://umap.openstreetmap.fr/en/map/schools-communities-with-infospots_1011977#6/-5.966/36.650